AS 4373—1996

Australian Standard®

Pruning of amenity trees

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The following interests are represented on Committee CS/90:

Arboricultural Association of Australia (Vic.)
Australian Institute of Horticulture
Australian Nature Conservation Agency
Electricity Supply Association of Australia
Flower Export Council of Australia
National Arborists Association of Australia
Nursery Industry Association of Australia
Royal Australian Institute of Parks and Recreation
Victorian College of Agriculture and Horticulture

Additional interests participating in preparation of Standard:

Local Government Tree Resources Association
Ryde College of Technical and Further Education
Arboricultural Association of Western Australia

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PREFACE

This Standard was prepared by the Standards Australia Committee CS/90 on Horticulture, to provide guidelines for the pruning of trees.

The recommendations given in this Standard are intended to apply specifically to urban and amenity trees, but exclude pruning for fruit production and silviculture.

In the preparation of this Standard, cognizance was taken of reference sources from the International Society of Arboriculture Certification Committee, Dr Alex Shigo, The Arboricultural Association of Australia, The Arboricultural Association of Western Australia, Ryde T.A.F.E. (Division of Horticulture), Burnley College and The National Arborists Associations of Australia and America.

The objective of this Standard is to provide tree workers, government departments, property owners, and contractors with a guide defining uniform tree pruning procedures and practices in order to minimize the impact of pruning on trees.

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FOREWORD

The intention of this Standard is to encourage pruning practices and procedures that reduce the risk of hazard development, branch failure, fungal infection or premature tree death.

Trees often require pruning to maintain clearance for utility services and buildings or to improve the safety, structure, health and beauty of the tree.

The procedures in this Standard are based on the widely accepted theories of compartmentalization of decay in trees. Lopping, topping or flushcutting are unacceptable practices.

Pruning should be carried out by tree workers who through related training, on-the-job experience and qualifications are familiar with the principles, techniques and hazards of this work. Root pruning is beyond the scope of this Standard. However, should the need arise, expert guidance should be obtained regarding root pruning and excavation around and near trees. Root damage can result in death, disease or instability to the tree.

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Pruning of amenity trees

1 SCOPE This Standard describes methods for pruning of trees and encourages correct and uniform practices. It is intended for use on amenity trees and includes formative pruning, hazard reduction, selective pruning and thinning. It does not include practices related to timber, foliage, fruit and flower production, root pruning, chemical pruning nor to sculptural forms of pruning such as topiary hedging and pleaching. The Standard also excludes information on wildlife habitat and safety of the tree worker.

2 APPLICATION This Standard is intended for use by tree workers, government departments, building contractors and others involved with contractual arrangements for tree pruning. The Standard will also serve as a guide for property owners and others who specify pruning procedures or alternatively who wish to carry out work of this nature themselves.

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Bark—all tissue outside the vascular cambium. Bark is usually divided into inner bark-active phloem and aging and dead crushed phloem.

3.2 Branch—organ which supports leaves, flowers and fruit.

3.3 Branch bark ridge—raised or furrowed bark in the branch crotch that marks where the branch wood and trunk wood meet. Formed by compaction or expansion as the girth of the branch and trunk increase. (See Figure 1(b).)

3.4 Branch collar—trunk tissue that forms around the base of a branch between the main stem and the branch. As the branch decreases in vigour or begins to die, the branch collar becomes more pronounced. (See Figures 1(a) and 3.)

3.5 Bud—embryonic vegetative or reproductive tissue which may be terminal, axillary or adventitious in origin. Buds can be active or dormant.

3.6 Codominant stems—stems or trunks of about the same size originating from the same position from the main stem. When the stem bark ridge turns upward the union is strong, when the ridge turns inward the union is weak. (See Figure 2.)

3.7 Compartmentalization—dynamic tree defence process involving protection features that resist the spread of pathogens.

3.8 Crown—portion of the tree consisting of branches and leaves and any part of the trunk from which branches arise.

3.9 Decay—degeneration and delignification of plant tissue, including wood, by pathogens or microorganisms.

3.10 Epicormic shoots—shoots produced by dormant buds within the bark or stems of a tree as a result of stress, lopping or increased light.

NOTE: Epicormic shoots usually have a weaker form of branch attachment.

3.11 Extruded bark—outwardly formed bark at the junction of branches or codominant stems.

3.12 Final cut—also referred to as target cut. This is the final cut in the process of the reduction or removal of branches and stems. The purpose of this final cut is to reduce the risk of microorganism infection according to the principles of compartmentalization and to encourage even wound closure. (See Figure 1.)

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